

CLAIMS

What is claimed is:

1. A data structure for an electronic mail file comprising:
a first portion storing a header containing links to information within the file;
a second portion storing electronic mail data; and
a third portion storing variable meta-data information.
2. The data structure of claim 1, wherein the header includes a link to a start of the electronic mail data.
3. The data structure of claim 1, wherein the header includes a link to an electronic mail sender.
4. The data structure of claim 1, wherein the header includes a link to an electronic mail recipient.
5. The data structure of claim 1, wherein the header operates as an encoder and monitors changes to the variable meta-data information.
6. The data structure of claim 1, wherein the header operates as an encoder and monitors a location of the electronic mail data within the file.
7. The data structure of claim 1, wherein the meta-data information is referenced in the header.
8. A method of encoding electronic mail comprising:
combining into a single file electronic mail data and variable meta-data information;
monitoring changes to the meta-data information with a header; and
monitoring a location of the electronic mail data within the file with a the header.

9. The method of claim 8, wherein the electronic mail data is of variable length when unrecorded and is of fixed length when recorded.

10. The method of claim 8, wherein the meta-data information is referenced in the header.

11. The method of claim 8, wherein the header operates as an encoder.

12. The method of claim 8, wherein the header contains links to a start of the electronic mail data, to an electronic mail sender, and to an electronic mail recipient.

13. A computer readable medium having computer readable instructions encoded therein to:

accept an electronic mail connection;

receive electronic mail data;

record the electronic mail data;

compute and record meta-data information;

compute and record links within a header; and

pass a file containing the electronic mail data and meta-data for processing.

14. The computer readable medium of claim 13, wherein the electronic mail data is of variable length when unrecorded and is of fixed length when recorded.

15. The computer readable medium of claim 13, wherein the meta-data information is referenced in the header.

16. The computer readable medium of claim 13, wherein the header links include links to a start of the electronic mail data, to an electronic mail sender, and to an electronic mail recipient.

17. The computer readable medium of claim 13, wherein the header is used to monitor changes to the meta-data information.

18. The computer readable medium of claim 13, wherein the header is used to monitor a location of the electronic mail data within the file.

19. A computer readable medium having computer readable instructions encoded therein to:

open a file containing electronic mail data and meta-data information;

recompute the meta-data information;

attempt delivery of an electronic mail;

rewrite the meta-data information;

change links contained within a header; and

close the file.

20. The computer readable medium of claim 19, wherein the electronic mail data is of variable length when unrecorded and is of fixed length once recorded.

21. The computer readable medium of claim 19, wherein the meta-data information is referenced in the header.

22. The computer readable medium of claim 19, wherein the header includes links to a start of the electronic mail data, to an electronic mail sender, and to an electronic mail recipient.

23. The computer readable medium of claim 19, wherein the header operates as an encoder.

24. The computer readable medium of claim 23, wherein the header monitors changes to the meta-data information.

25. The computer readable medium of claim 23, wherein the header monitors a location of the electronic mail data within the file.

26. A method of providing an electronic mail file from a sending computer to at least one receiving computer within a data communication network comprising:
establishing a simple mail transfer protocol (SMTP) session between the sending computer and the at least one receiving computer;
generating commands by the sending computer;
sending the commands to the at least one receiving computer; and
sending replies from the at least one receiving computer to the sending computers wherein the electronic mail file includes a header containing links to information within the file, electronic mail data, and variable meta-data information.

27. The method of claim 26, wherein the data communication network includes an Internet or Intranet.

28. The method of claim 26, wherein the header includes a link to a start of the electronic mail data, to an electronic mail sender, and to an electronic mail recipient.

29. The method of claim 26, wherein the header monitors changes to the meta-data information and monitors a location of the electronic mail data within the file.

30. The method of claim 26, wherein the meta-data information is referenced in the header.